**SNC 2D Culminating Task: Science Fair (10% of Final Mark)**

## Working with a partner, you are responsible for choosing an approved topic and completing an experiment using the scientific method. You will individually write a laboratory report and create a display and model/demonstration to display your project for an organized science fair at the end of the semester. Your experiment must relate to a topic covered in the course and must have real-world or practical applications. This project will be completed throughout the semester.

## The Process

Please consult this [Project Guide](http://www.sciencebuddies.org/science-fair-projects/project_guide_index.shtml) page at Sciencebuddies.org frequently as you work through your project. Here you will find the help you need in:

* Researching your topic
* Following the appropriate steps of the Scientific Method
* Formulating a good question
* Constructing a hypothesis
* Conducting the experiment
* Analyzing the data
* Referencing (using APA format)

***Task List:***

1. ***Topic Selection****:*

Choose a topic for the Science Fair. The topic must be related to one of the following units of study in the course; UNIT 1: Chemistry, or UNIT 2: Light and Geometric Optics, or UNIT 3: Tissues, Organs and Systems, or UNIT 4: Climate Change. The topic must have real-world or practical applications and be approved by the teacher.

**Topic Due Date: Monday September 28, 2015**

For some ideas about what you might want to learn about, visit the Sciencebuddies page on [Student Resources for Science Fair Projects](http://www.sciencebuddies.org/science-fair-projects/student_resources.shtml?From=Tab) and click on the [Topic Selection Wizard](http://www.sciencebuddies.org/science-fair-projects/recommender_register.php?From=sidebar) to do a survey of your own interests that will produce project suggestions for you. Visit these pages for specific project ideas: [Human Biology](http://www.sciencebuddies.org/science-fair-projects/recommender_interest_area.php?ia=HumBio&d=advanced)  [Plant Biology](http://www.sciencebuddies.org/science-fair-projects/recommender_interest_area.php?ia=PlantBio&d=advanced) [Chemistry ideas Optics ideas](http://www.juliantrubin.com/fairprojects/physics/optics.html)

1. ***Inquiry Process Concept Map***:

Complete the assigned concept map. You may be required to conference with your teacher regarding your plans for your experiment.

**Concept Map Due Date: Wednesday October 14, 2015**

1. ***Completion of the Experiment:***

The experiment must be completed by the date given by the teacher. You are responsible for getting all necessary materials (please consult with your teacher). You must provide photographic or video evidence of you completing your science fair investigation if it is done outside of school

**Experiment Completion Date: Monday, November 16, 2015**

1. ***Individual Laboratory Report:***

The report should include all sections listed in the ‘Laboratory Checklist’. The rough draft of your

laboratory report will be peer assessed in class.

**Rough Draft of Laboratory Report Due Date: Monday, November 30, 2015**

After receiving feedback from your peers, you will edit your laboratory report and submit it for

evaluation.

**Final Laboratory Report Due Date: Thursday, December 3, 2015**

1. ***Display:***

After you have received feedback on your laboratory report, you will put together a display that includes all sections of the report in a concise and attractive manner. Please see ‘Science Fair Display Checklist’. You are also responsible for creating a model or demonstration to illustrate a concept from your project.

**Display Due Date: Wednesday, December 16, 2015**

***Grading of Science Fair***

This entire project will make up 10% of the final mark on the report card and will be evaluated as follows:

* Topic Selection [4 marks]
* Inquiry Process Concept Map & Conference [10 marks]
* Laboratory Report – see attached ‘Laboratory Checklist’ [40 marks]
* Display & Presentation – see attached ‘Science Fair Display Checklist’ [36 marks]

The entire project is out of 90 marks.

**Science Fair Date: Wednesday, December 16, 2015**